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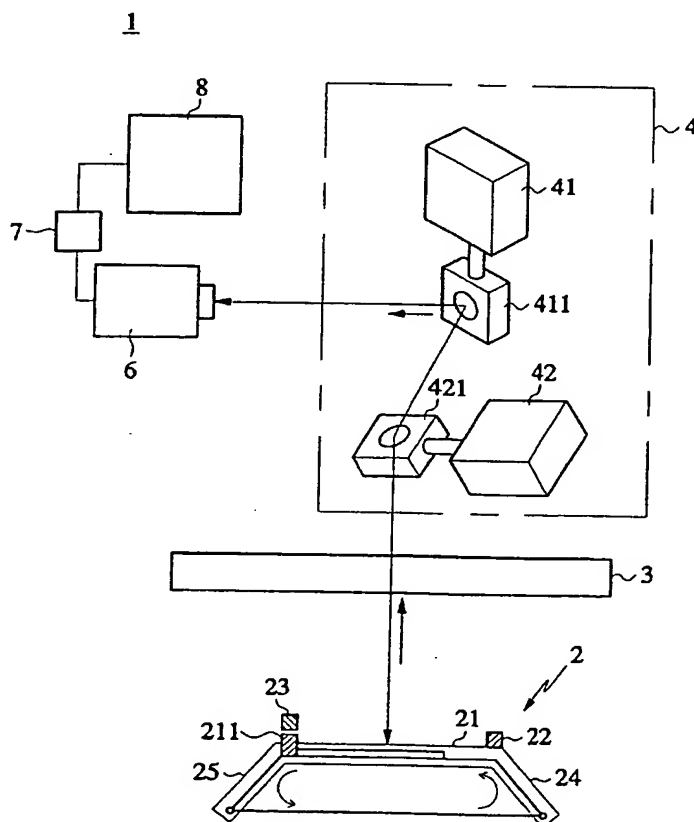
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(54) Title: VISION INSPECTION APPARATUS USING A FULL REFLECTION MIRROR



(57) **Abstract:** The present invention relates to a vision inspection apparatus and method using total reflection mirrors. The present invention provides a vision inspection apparatus using the total reflection mirrors comprising; a board position control module for fixing a printed circuit board; an independent lighting unit for primarily illuminating the printed circuit board; a photographing position control module for changing a reflection angle to required location coordinates of the printed circuit board; a camera for obtaining an image of the printed circuit board; a control unit including a motion controller, a lighting controller, and an image processor to control the components; and a vision processing unit for reading the image obtained through the camera and judging whether the image is good or bad. The present invention has effects capable of obtaining a clear image of inspection objects by increasing a quantity of light entered into the camera through a stationary direct illuminating type of independent lighting unit, and accomplishing a precise inspection by preventing shadows from generating on the vision inspection of the object such as a printed circuit board on which different sizes of components are mounted.

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